**Bhargavi M**

**SUMMARY**

* Over **6+ years** of experience as a **Performance Analyst/Quality Analyst/Automation Engineer** in the field of Information Technology, with extensive experience in **Analysis and Quality Assurance testing** of **Client/Server, Web-based applications.**
* Highly proficient in **performance testing** using **HP Load Runner** & **HP Performance Center**. Hands on experience in different protocols like **web (HTTP/HTML)**, **PeopleSoft**, **SAP Web, Windows Socket** and **Web Services**.
* Involved in complete software testing lifecycle and owning the test deliverables throughout SDLC along with being experienced in methodologies like **Waterfall, Iterative and Agile.**
* Experienced in enhancing the VuGen scripts **Correlations techniques, Parameterization, and Synchronizations.**
* Skilled in **debugging** and adjusting scripts by running in **VuGen** with Runtime Settings logs set to display all messages.
* Exposure to various LoadRunner API functions used by **Vuser** generator for scripting.
* Proficient in **plotting** and **implementing scenarios** and loading **Load Runner scripts into a controller.**
* Well versed with the behavior of online monitors and the techniques to fix monitoring issues and monitoring **Vuser** status.
* Expert in finding performance bottlenecks both in client side and server side and making recommendations for **Performance Tuning**.
* Extensive Experience in **Manual** and **Automated** testing of applications developed on **Windows** environment.
* Experienced in interacting with **Business, Development and System Administration** teams.
* Led and implemented various test cycles including **System Testing, Integration Testing, User Acceptance Testing (UAT), Regression Testing, Smoke Testing, Functional Testing, Black box testing, Recovery Testing, Compatibility Testing, End to End Testing**
* Responsible for creating, executing formal **Test Plans** and **Test Scripts** for **Functional, Regression** and **User Acceptance Testing.**
* Experience in defining **test procedures** and creating **test cases** based on client's requirements document.
* Expertise in using automated testing tools like **QTP** to create regression testing scripts and to data drive the application.
* Extensive use of bug tracking tools like **HP Quality Center** for identifying, analyzing, and documenting defects.
* Strong communication and interpersonal skills self-motivated and highly organized with excellent system analysis and problem solving skills.
* Demonstrated proficiency in handling multiple tasks/projects in a fast-paced environment, often within tight time frames.

**TECHNICAL SKILLS:**

* **Testing Tools** : HP Performance Center, QTP, Quality Center
* **Test Strategies :** System Integration, Regression, Functional, Performance
* **Proprietary Tools** :Selenium

**Scripting Languages**  : VB Script and Shell Scripting

**RDBMS** : MySQL, MS Access & SQL Server 2008

#### Operating Systems : Windows 95/98/2000/XP/7/8

* **Defect Tracking Tools** : HP ALM, Mercury Quality Center, Bugzilla, Rational ClearQuest
* **Configuration Management** : Visual Source safe, CVS
* **Other Tools** : MS Office

**EDUCATION:**

* Bachelor’s in Mechanical Engineering from Sri Venkateswara University, India.
* Master's in Mechanical Engineering from Jawaharlal Nehru Technological University, India

**PROFESSIONAL EXPERIENCE: Jan 2014 – Till Date**

**Paragon Solution,** New Jersey

**Role: Performance Analyst**

**PMMT&RLC:**

The Pavement Marking Management Tool (PMMT) is responsible for the collection and analysis of pavement condition data on the State's Trunk Highway system. In addition, we collect and analyze the pavement condition on the County State Aid Highway (CSAH) system through an agreement with the Division of State Aid for Local Government. Using GIS maps identifying the pavement markings.

The Route Location Converter (RLC) is primarily a flexible web tool to convert between different standardized Location Formats. It can convert single value at a time, or batch process a file of data. It also can retrieve some data about specific locations such as the Annual Average Daily Traffic (AADT) of a road or the Route and Rail they make up a rail grade crossing. Main objective of this tool is to improve the quality of transport service by calculating the routes using Latitude and Longitude. Calculating the routes for Metro to provide the better service to the customers for transportation. There are modules like X&Y Latitude and Longitude, File upload and Route Conversions.

**Roles and Responsibilities:**

* Actively involved in **gathering** and analyzing **of business requirements along with developing testing** strategy in various clients
* Responsible for reviewing and analyzing the requirements of the new system and identifying discrepancies that can hinder System, Regression, and User Acceptance Testing.
* Involved in project **planning, coordination** and **implemented** QA methodology
* Coordinated with **Functional Teams to Identify the Business Process to be Performance Tested.**
* Planned and generated **Vuser scripts with VuGen** and enhanced them with **correlation, parameterization and functions.**
* Generated customized reports for **testing the performance of various transactions by developing various user-defined functions as well as LoadRunner functions**.
* Created vuser scripts using **PeopleSoft** Protocol.
* Ability to diagnose **Web/App server performance issues/troubleshooting** using **LoadRunner Analysis** and **Wily Introscope.**
* Performed **IP Spoofing** using **LoadRunner** for load balancing issues.
* Checked for **Network Bottlenecks** using **Network Delay Time** and **VUser Graphs**.
* Worked with Load Runner in analyzing application performance for **varying loads and stress conditions.**
* Analysis of cross results**, cross scenarios**, **overlay graphs** and **merging different graphs**.
* Performed Web log analysis to deduce workload and understand the **peak workload use cases** and peak connected sessions with different timings involved for performance testing understand the prime need to performance test each case.
* Measured Response **times at sub transaction levels at web, App servers and database server levels by using Optimal Application expert, highly concentrated on Transactions per sec during testing.**
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* **Memory Leaks** were identified in Different components. **Protocol to Protocol Response** times, **Web Page break downs**, Components sizes were analyzed and reported.
* Developed and deployed test Load scripts to do **end to end** Performance testing using Load Runner.
* Developed Extensive performance test reports and documented all the test runs to track each test run.
* Analyzed server resources such as Total Processor Time to look for **performance bottlenecks**.
* Regression Testing performed on every new build of the application.
* Reporting the coverage status of test performed on weekly basis
* Developed test scripts for data driven tests and regression tests using QTP.
* Extensively used **Quality Center** as a **defect-tracking tool to report bugs and make communication with developers efficiently**
* Prepared **Test Metrics, Test Report** and lessons learned after each release

**Environment: Performance Center, Quality Center 11.0, HP QTP 10.0, Oracle, Java, Windows 7, MS Office 2007, Agile, WebSphere, Toad, Oracle, SQL.**

**EnerNOC, Boston, MA**  **April 2013 – Dec 2013**  **Role: Performance Analyst**

**Web Express Data Loader:**

Web Express Data Loader is an application for processing base data loads and reporting table updates. Application copies flat files from remote servers and creates a batch files on database server. Batch jobs are created to run automatically while loading the data into database from multiple counties like Mexico, Chile, Colombia and other countries.

**Roles and Responsibilities**:

* Involved in developing **Test Strategy, Test Plan, Test Scenarios, Test Case Design, Test Reports using business/functional requirements for both manual and automated tests.**
* Responsible for **performance testing** (Load, Stress and Volume) **using HP LoadRunner** (Controller, Virtual User Generator, Analysis).
* Defined **transactions to measure server performance under load by creating rendezvous points to simulate heavy load on the server.**
* Used **Parameterization** to emulate real user loads on **LR scripts**.
* Maintained enhancement and adding custom coding to make the script robust
* Performed result analysis using online **monitors and graphs using Load Runner**
* Verified **Data Loads using ETL Source to Target Mappings**.
* Analyze, interpret, and summarize meaningful and relevant results in a complete **Performance Test Report**.
* Used Correlation to obtain data that is unique for each run of the script in LoadRunner.
* Calculated **pacing** by gathering requirements from previous release
* Preparation of the Test Cases for **Functional, Performance, Volume, Load** and **Database Testing**.
* Worked on **Windows Sockets** protocol.
* Ramped up Virtual users in a load test to achieve a maximal transaction volume of 1200 concurrent users in a two hour time limit.
* Coordinated with Technical Teams to monitor **Database Query, CPU Utilization and Memory**.
* Analyzed the server resources such as **Available Bytes and Process Bytes for Memory Leaks**.
* Developed and executed various scenarios for baseline, **soak and load testing.**
* Configuring Run-time settings for **VuGen**, **Controller** and **Performance Center**.
* **Analyze, interpret, and summarize** meaningful and relevant results in a complete **Performance Test Report.**
* Worked extensively in testing boundary coverages to ensure the functionality of the application worked as expected.
* Executed the baseline performance tests for each release to verify the performance changes for significant business transactions.
* Generated test scripts using **QTP.**
* Tracked and reported the bugs with Quality center.
* Prepared test status report and weekly status report.
* Participate inWeekly Meetings with the management team and Walkthroughs.
* Arranged schedules and notifications for the QA Team, Development team, Middleware team and Business Banking team to meet and discuss status of the project.
* Designed Test Case documents for Performance testing in Quality Center and report defects.

**Environment: Java, Load Runner 10.0, Quality Center11.0, Oracle, Windows 7, WebSphere, Apache, HTML, ETL, MS Office 2007.**

**Autodesk, San Francisco, CA Aug 2012 – Mar 2013**

**Product Data Management:**

Controls blueprints, material specifications, processing specifications, performance requirements, and other documents. Manages product requirement change history and provides traceability.

**Roles and Responsibilities:**

* Performed **Functional, System, and Regression testing of a web based application working in an agile environment**.
* Understanding the Requirements and Design documents.
* Experience in Test Environment Setup and Test Infrastructure Development in Manual.
* Preparing the Test Plan and Test Scenarios Document.
* Worked on **Web Services** protocol.
* Preparing and Maintaining the Requirement Traceability Matrix **(RTM)**.
* Well versed with the behavior of online monitors and the techniques to fix monitoring issues and monitoring Vuser status. .
* Measured Response times at sub transaction levels at web, App servers and database server levels by using Optimal Application expert, highly concentrated on Transactions per sec during testing.
* Reviewing the Test Cases Prepared by the Team Members.
* Performed backend testing creating SQL queries in **SQL Server**.
* Performed **Functional Testing, Compatibility Testing, Negative testing, GUI Testing** and **Security Testing.**
* Created Data Driven Tests to validate the same scenario with different test data.
* Compiling results from data validation into individual reports that summarizes pass/fail ratio and the types of failures being discovered.
* Performed result analysis using online monitors and graphs using Load Runner.
* Designed Test Case documents for Performance testing in Quality Center and report defects.
* Prepared weekly productivity reports and submitted test metrics to the management.

**Environment: Load Runner 10.0, HP Quality Center 9.5, QTP 10.0, Java, Web Sphere, HTML, DHTML, JSP, Toad, Oracle, Agile.**

**Tenaris, Houston, TX Sep 2011 – Jul 2012**

**Role: Performance Analyst**

**Tele Billing System:**

Tele Billing System is a Telecom domain project. Its client is Alcatel, France. The purpose of this project is to provide proper telecom services to its customers in France. Next, Generation Billing System is divided into no of modules like TM Billing, POS, Customer Care, and Agent Activation Etc. I have involved in TM Billing and CARE modules. The module TM Billing talks about Features and Rate-plans of telecom services. This module is again divided into sub modules like Features, Promotions and Rate Plans. I have involved in Features sub module. In Features sub module, a new Feature can be added to the existing telecom service, the existing Feature for a particular service can be edited, viewed, deleted. A feature of a Particular service can be copied to some other service. Customer Care module talks about activating a service, hot lining a service, disconnecting a service. It also talks about sending the alert messages to the service holder before going to activating a service, hot lining a service or disconnecting a service.

**Roles and Responsibilities:**

* Reviewed and analyzed the Business requirements and Functional requirements to better understand the client needs.
* Analyzed the **performance requirement** **documents** and **functional specification documents**.
* Performed Stress, Load and Volume Testing.
* Developed **Vuser scripts by recording test cases, adding checkpoints, parameterization, correlation and also custom code as needed to enhance the scripts.**
* Developed **VUser Scripts in Web, Web services, SAP protocols**
* Gathered user requirements and designed **Test Plans and Test Scenarios** accordingly.
* Involved in full life-cycle of the project from requirements gathering to transition using **Agile Methodology**.
* Created **test cases based on the requirements and the test conditions in Mercury Quality Center** and identified test data in order to match with requirements.
* Performed end to end performance testing, fine tuning the applications.
* Planned and **generated Vuser scripts with VuGen and enhanced them with correlation, parameterization and functions**.
* Executed **Load, Stress and Endurance testing** to simulate a process, which allowed using more than 1000 virtual users.
* Generated customized reports for testing the performance of various transactions by developing various user-defined functions as well as Load Runner functions.
* Worked with Load Runner in **analyzing application performance** for varying loads and stress conditions.
* Independently **executed the test scenario, analyzed** the execution statistics by monitoring the online graphs.
* Interacted with developers to **Report and Track Bugs using Quality Management system (QMS).**
* Arranged training and information sessions for Data entry personnel as part of **User Acceptance Testing** (UAT). Handed out incident reporting templates for recording bugs during UAT.
* Used QC to invoke the script and initially performed the base line scripting and organized all the scripts in systematically and generated reports
* Involved in extensive Interactive and manual testing of the product using Test director/Quality Center.

**Environment: HP Load Runner 9.5, Quick Test Professional 9.5, Mercury Quality Center 9.5, Oracle, Win XP, MS Office 2007**

**Redwood Trust – Mill Valley, CA Jan 2011 – Aug 2011**

**Role: Performance Analyst**

**Laboratory Information Management System:**

Keeps tracks the sample from the point of sampling, through the delivery of the sample to the laboratory, to the reporting of final results to the client. This system also includes an accounting aspect to monitor the efficiency of the laboratory in carrying out analyses and to prepare invoices for the cost of the analyses. System also involves in keeping track of the employee details.

**Roles and Responsibilities:**

* Analyzed User Requirements, attended periodic meetings for changes in the application requirements and documents and implemented procedures for test changes
* Wrote VB Scripts for data driven testing in Quick Test Pro and performed Regression Testing using Quick Test Professional
* Responsible for **creating high level performance testing strategy and robust project plans** for each release.
* Created **Vuser scripts** that contained tasks performed by each Vuser, tasks performed by Vusers as a whole, and tasks measured as transactions.
* Changed the **runtime settings** and performed load rate calculation that includes setting up **think time, pacing, selecting number of Vuser, number of iterations** and number of transaction.
* Created scripts for web applications using **Winsockets protocol** and client server applications using **web services** protocol.
* Enhanced the basic script by **parameterizing** the constant values using Load Runner.
* Scheduling the **scenarios using the Load Runner's** **Controller** and **analyzing the results** using Analyzer.
* Inserted **rendezvous points** in the LR scripts and executed them in manual and goal oriented scenarios in **LR Controller**.
* Performed **baseline, benchmark, stress, and capacity** **tests** using Load Runner.
* Created test data for dropping **into BizTalk servers** for load/performance testing.
* Analyzed various graphs including Database Resource Graphs, **Network Monitor** Graphs, User Graphs, **Error Graphs, Transaction Graphs** and Web Server Resource Graphs.
* Responsible for **analyzing** application and components behavior with **heavier loads** and optimizing server configurations.
* Worked on Throughput, Hits per seconds, Network delays, latency, and capacity measurements and **reliability tests of on multi-layer architecture**.
* Responsible for creating Use Cases, Test Plans, Test Cases and Final Reports, **Power Point presentations and documents** to deliver to team on time.
* Worked closely with engineering team to discuss the design and testing aspects of the applications to design the test plans and to isolate the root cause of defects using Quality Center.
* Parameterized large and complex test data to accurate depict production trends. Used Load Runner tool to view Load test results and drill down to identify possible bottlenecks
* Documented average response times, 90% response times and reported them to the application team.
* Test results and bugs are reported to the development team in Quality center 11.0
* Created traceability of testing cycle right from requirements all the way up to Defects reporting using Quality center 11.0

**Environment: HP Load Runner 9.0, Quick Test Professional 9.5, Quality Center 9.5, Oracle, Windows XP, MS Office 2007, Visual Studio 2005,**

**Constellation Energy Group, Oswego, NY Dec 2009 – Dec 2010**

**Role: Quality Analyst**

**SLA Monitoring** is a web based system to track the service level agreements of the service provider with their clients. The SLA Monitoring System monitors the SLA terms and notifies the concerned people / group regarding the status of the SLA term. The system facilitates in tracking the client's acceptance on the attended problem in the form of notification feedback. The system also maintains and generates various alerts for the SLA actions that are to be sent to different users / user groups

**Roles and Responsibilities:**

* Gathered requirements from subject matter experts and business stakeholders to create user stories in TFS.
* Created Test Scenarios, Test Cases, and detailed Test Scripts in Quality Center for all phases of testing
* Utilized HPs Quality Center for capturing requirements, test case development, execution, and defect tracking
* Wrote SQL queries to access the data from the database tables to ensure data integrity
* Attended daily scrum meetings and bi-weekly sprint planning meetings for agile projects.
* Reported defects to the development team and performed regression testing once fixed.
* Worked directly with the Project Managers to communicate the status of testing along with issues and risks of the project.
* Demonstrated Change Management throughout the project life cycle.

**Environment: Quick Test Professional 9.5, Mercury Quality Center 9.2, Oracle, Windows 2000, MS Office 2007**

**Tulasi Technosoft Pvt Ltd. – Hyderabad, India**  **Jan 2008 – Oct 2009**

**Role: Quality Analyst**

**CPPL**:

Cpacks Pvt Ltd. exports paper boxes to different countries for the different types of vendors mainly concentrated on corrugated tobacco boxes. This application is completely a web based ERP application. This project includes six modules, which includes Customization, Inventory management, Human resource management, Purchase, Production, Sales and Distribution, and Accounts

**Roles and Responsibilities:**

* Reviewed Project documentation including Project charters, Business Requirements, Technical Requirements, and Functional Design Specifications.
* Met with the Subject Matter Experts, Business Analysts, and System Analysts to identify gaps in the requirements.
* Participated in Requirement Walk through meetings to understand the in scope requirements and utilized HPs Quality Center for capturing requirements
* Handling escalated calls on a daily basis and resolving ongoing issues.
* Interacted with the developers and business analyst to resolve the defects.
* Wrote SQL queries to access the data from the database tables to ensure data integrity.
* Created Test Scenarios, Test Cases, and detailed Test Scripts in Quality Center for all phases of testing; Unit, Integration and System Testing.

**Environment: Quick Test Professional 9.0, Mercury Quality Center 9.0, Oracle, Windows 2000, MS Office 2007**